AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph [18] of the originally filed patent application with the following rewritten paragraph:

Figure 2 show a flowchart 200 of a process for accelerating TCP/IP applications without offloading the TCP/IP stack onto a network adapter according to the present invention. At step 201, a TCP/IP application programs the R, O, M, V and A programmable parameters of packet classifier 104. At step 202, TCP/IP communications are monitored monitor by packet classifier 104 and it is determined whether an application header is detected. If not, flow remains at step 202. Otherwise, when packet classifier detects an application header, flow continues to step 203 where packet classifier 104 loads registers R from offsets O in the detected header and at step 204 masks values V with the contents of registers R. At step 205, it is determined whether the results of the masking match the results with a corresponding programmed pattern. When the results of the masking match a programmed patternpatterned, flow continues to step 206 where packet classifier 104 takes action A that is specified in the pattern. When action A involves direct data placement, headerhead information (i.e., I/O tags and protocol details) are extracted for DMA-ing the data payload of the of the application header to reserved memory RM associated with the application. For example, when an I/O tag corresponds to reserved memory RM1-RM2, action A involves moving the contents of TCP sequence numbers S1-S2 to RM1-RM2. Flow continues to step 202.